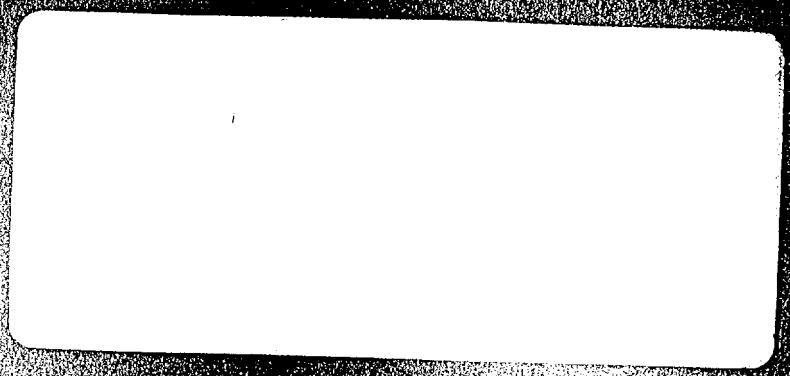

FAIRCHILD

SPACE AND DEFENSE SYSTEMS

FAIRCHILD SPACE AND DEFENSE SYSTEMS
A Division of Fairchild Camera and Instrument Corporation
300 Robbins Lane, Syosset, New York

Proposal No. SME-105-64-40A
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(S. I. 890,017)

105 TECHNICAL PROPOSAL
VOLUME 2

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STATINTL

Prepared by: [redacted]
The Technical Staff of
Data Processing Section

STATINTL

Approved by [redacted]

STATINTL

Approved [redacted]
Section Manager

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SECTION 1

INTRODUCTION

The following is Fairchild Camera and Instrument Corporation's response to Item B of the five technical items which were asked to be investigated on the 105 Program. Items C, D and E have been investigated and a technical proposal has been submitted on 26 March 1965. STATINTL

Item B is the study of what will be required to incorporate the silicon diode array data block in place of the [redacted] approach. After a careful investigation it has been determined that, using the silicon diode array, there was only one possible method that can be proposed at the present state of the art. This method produces 56 alpha-numeric characters with the addition of a 280, eight bit machine code added storage inside the same data block area. Fourteen (14) of these 280, eight bit machine codes will be used as index marks so that effectively there will be 266 eight bit words of storage. This method will be described in Section 2 of this report. If it is required to produce only 128 machine characters, this same chip construction would be used and only 128 cells would be wired up. The cost difference would be very slight between the two systems.

STATINTL

In order to incorporate the silicon diode array data block in place of the [redacted] approach it will be required that the data block information be stored in some type of storage device so that, if multiple chip copies are required, a permanent record will be available. In addition to the required storage there must be a Decode-Encode type of logic required

to convert the American Standard Code into an alpha-numeric character to be printed. These two functions will require the majority of the added space required.

Included in this report are the costs, the additional space and power supplies required to incorporate this change into the presently conceived "Chip Printer Unit".

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